



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,082	10/22/2003	Charles Greene	4005-031405	9297
28289	7590	04/07/2005		
THE WEBB LAW FIRM, P.C. 700 KOPPERS BUILDING 436 SEVENTH AVENUE PITTSBURGH, PA 15219			EXAMINER BLOUNT, ERIC	
			ART UNIT 2636	PAPER NUMBER

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/691,082	GREENE ET AL.
	Examiner	Art Unit
	Eric M. Blount	2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 22 October 2003.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-28 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-23 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 22 October 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Identification Apparatus With Automated Signal Receiving Means.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5, and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Garber et al [U.S. Patent No. 6424262].

As for **claims 1 and 12**, Garber discloses an identification apparatus for use in connection with a plurality of discrete identity source elements positioned in an identification apparatus signal identification area. An RFID reader functions as the identification apparatus and RFID tags are discrete identity source elements. The identification apparatus comprises at least one signal receiving mechanism configured to receive a signal emitted from at least one of a plurality of identity source elements, the signal receiving mechanism having a field of detection comprising at least a portion of the identification apparatus signal identification area wherein at least one signal

receiving mechanism is configured to move along at least one axis of movement (column 14, lines 45-64). A user is able to move the at least one signal receiving mechanism in the X, Y, and/or Z axes of movement. Further, Garber discloses a control mechanism in communication with the at least one signal receiving mechanism and configured to receive, process, and transmit the signal received by the at least one signal receiving mechanism (column 14, line 65 - column 15, line 15). The portable computer taught by Garber is considered a control mechanism. The portable computer includes a processor, user interfaces, memory, ports, and an operating system for receiving, processing, and transmitting information received from the signal receiving mechanism.

Regarding **claim 2**, Garber discloses that the signal receiving means is an antenna configured to receive radio frequency signals emitted from identity source elements, and wherein the identity source elements are radio frequency transponders (Figure 4).

As for **claims 3 and 5**, Garber teaches that at least one of the identity source elements is in operative communication with at least one item positioned in the identification signal identification area (column 11, lines 39-44). The signals emitted by the identity source elements are signals having a characteristic unique to at least one item (Figure 13).

As for **claim 10**, Garber discloses a display mechanism in communication with the control mechanism and configured to provide a visual display to a user corresponding to item data (Figure 13).

Regarding **claim 11**, Garber discloses a user input mechanism in communication with the control mechanism and configured to receive user input signals to control the control mechanism (column 15). The user interface is used to control the control the control mechanism.

As for **claim 13**, the control mechanism is configured to receive, process, and transmit signals and initiate actions based upon signal content (column 8, lines 10-20 and column 14, line 65 – column 15, line 16).

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-10, 12, and 14-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garber et al [U.S. Patent No. 6424262] in view of Burt [U.S. Patent No. 3958102].

As for **claims 1, 12, 18, and 24**, Garber discloses an identification apparatus for use in connection with a plurality of discrete identity source elements positioned in an identification apparatus signal identification area. An RFID reader functions as the identification apparatus and RFID tags are discrete identity source elements. The identification apparatus comprises at least one signal receiving mechanism configured

to receive a signal emitted from at least one of a plurality of identity source elements, the signal receiving mechanism having a field of detection comprising at least a portion of the identification apparatus signal identification area wherein at least one signal receiving mechanism is configured to move along at least one axis of movement (column 14, lines 45-64). The portable reader taught by Garber is capable of moving in the X, Y, and Z, axes of movement. Garber does not disclose a control mechanism in communication with the at least one signal receiving mechanism for controlling the movement of the signal receiving mechanism.

In an analogous art, Burt discloses an identification apparatus which comprises a control mechanism in communication with at least one signal receiving mechanism configured to control the movement of the at least one signal receiving mechanism along at least one axis of movement (Figure 2, column 1, lines 36-49). The scanner disclosed by Burt functions as a signal receiving means. The at least one signal receiving means moves along the X and/or Y axes of movement.

It would have been obvious to one of ordinary skill in the art at the time of the invention by applicant, to have modified the system of Garber et al to automate the movement of a signal receiving means in accordance with the teachings of Burt, but adapting the system to accommodate and retain the ability to translate and rotate in three dimensional space, in order to automatically move the signal receiving means about the interrogation space in any convenient path in order to reach necessary positions to scan all discrete identity source elements. The motivation to automate

would be to save the time and effort required to manually scan articles within an interrogation space

Regarding **claim 2**, Garber discloses that the signal receiving means is an antenna configured to receive radio frequency signals emitted from identity source elements, and wherein the identity source elements are radio frequency transponders (Figure 4).

It would have been obvious to one of ordinary skill in the art to modify the signal emitting and receiving means of Burt with the signal emitting and receiving means of Garble because the RFID system would provide several advantages over the barcode scanner of Burt (column 7, line 40 – column 8, line 19).

As for **claims 3, 5, 19, and 20**, Garber teaches that at least one of the identity source elements is in operative communication with at least one item positioned in the identification signal identification area (column 11, lines 39-44). The signal emitted by an identity source has a characteristic unique to at least one item (Figure 13).

Regarding **claims 4 and 21**, it would be obvious to one of ordinary skill in the art that an RFID device may be in operative communication with any article whether it be a book, medical, device, or shipping parcel.

Regarding **claim 6**, Burt discloses a control mechanism that further comprises an input/output mechanism (100) in communication with the signal receiving mechanism and configured to translate at least one output signal into a digital output signal (column 4, lines 36-41). A central control device is in communication with the input/output

mechanism and is configured to receive process and transmit signals and initiate action based upon the digital output signal received (Figure 5 and column 4, lines 36-57).

As for **claims 7 and 8**, Burt teaches a control mechanism that comprises a power control module in communication with the input/output mechanism. It is obvious that several system components are operating from the power outputs and that each is provided with a specified power level. As for the use of a backup power module, it is obvious and well known in the art to provide a backup power system for use in the event of an emergency or power outage. This can be viewed as a matter of design choice.

As for **claims 9 and 22**, the central control device taught by Burt is a personal computer (column 5, lines 5-14).

As for **claims 10 and 23**, Burt discloses a display mechanism in communication with the control mechanism and configured to provide a visual display to a user corresponding to an action initiated by the control mechanism (column 5, lines 12-14).

Regarding **claims 14 and 25**, Burt discloses a control and power cable, which act as a feeder mechanism and is in communication with the control mechanism. The feeder mechanism is configured to power the signal receiving mechanism (column 3, lines 20-30).

As for **claims 15-17 and 26-28**, Burt discloses a drive mechanism for moving the signal receiving means along the axis of movement (column 3, lines 49-63). It would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant that any kind of motor that would drive the signal receiving means along an axis of movement would be suitable.

***Conclusion***

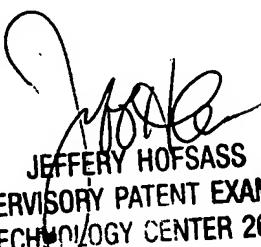
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Though not used to make an art rejection, Buchmann et al, Black et al, Okamura, Ekchian et al, and Francis et al, each taught object tracking and identification apparatus that were useful during the examination of the present application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M. Blount whose telephone number is (571) 272-2973. The examiner can normally be reached on 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on (571) 272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric M. Blount  
Examiner  
Art Unit 2636

  
JEFFERY HOFSSASS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600